

WHAT IS CLAIMED IS:

1. An intravascular lead, the lead including:
 - an insulating elongate body having a proximal and a distal end and a peripheral surface;
 - at least one elongate electrical conductor, having a proximal end and a distal end, the conductor carried within the elongate body and extending longitudinally along substantially the entire length between the proximal and distal ends of the elongate body;
 - at least one electrode located at or near the distal end of the elongate body, the electrode being coupled to the distal end of the conductor; and
 - an at least partially dissolvable coating at least partially on an insulating portion of the peripheral surface at or near the distal end of the elongate body, the coating providing at least one of a rough surface, a porous surface, and a swollen surface after being exposed to an aqueous substance.
2. The lead of claim 1, in which the coating provides a substantially smooth surface before being exposed to the aqueous substance.
3. The lead of claim 2, in which the coating includes a plurality of substantially soluble particles dispersed in a substantially insoluble medium.
4. The lead of claim 3, in which the insoluble medium is adhered to an insulating portion of the elongate body.
5. The lead of claim 4, in which the soluble particles include a therapeutic agent.

6. The lead of claim 5, in which the therapeutic agent includes at least one of a drug, a steroid, a corticosteroid, an antibiotic, and an antirejection agent.
7. The lead of claim 5, in which the therapeutic agent includes one of dexamethasone acetate and dexamethasone sodium phosphate.
8. The lead of claim 5, in which the insoluble medium includes a biocompatible medical adhesive.
9. The lead of claim 8, in which the medical adhesive includes silicone.
10. The lead of claim 1, in which the coating also covers at least part of the at least one electrode.
11. The lead of claim 1, in which the coating includes a therapeutic agent that promotes friable tissue associated with the insulating portion of the peripheral surface of the lead for easier lead removal.
12. An intravascular lead for providing cardiac rhythm management therapy, the lead including:
 - a flexible insulating elongate body having a proximal and a distal end and a peripheral surface;
 - a plurality of elongate electrical conductors, each conductor having a proximal end and a distal end, each conductor carried within the elongate body and extending longitudinally along substantially the entire length between the proximal and distal ends of the elongate body;
 - a plurality of electrodes located at or near the distal end of the elongate body, each electrode being coupled to the distal end of at least one of the conductors; and

a partially dissolvable coating at least partially on an insulating portion of the peripheral surface at or near the distal end of the elongate body, the coating providing at least one of a rough surface, a porous surface, and a swollen surface after being exposed to an aqueous substance, the coating including a plurality of substantially soluble particles dispersed in a substantially insoluble silicone adhesive that is bonded to the insulating elongate body, and in which the substantially soluble particles are selected from the group consisting of dexamethasone, dexamethasone acetate and dexamethasone sodium phosphate.

13. The lead of claim 12, in which the coating includes up to 40% substantially soluble particles dispersed in the adhesive.

14. The lead of claim 12, in which the coating includes up to 35% substantially soluble particles dispersed in the adhesive.

15. The lead of claim 12, in which the coating includes up to 30% substantially soluble particles dispersed in the adhesive.

16. The lead of claim 12, in which the coating also covers at least part of at least one of the electrodes.

17. An intravascular lead for providing cardiac rhythm management therapy, the lead including:

a flexible insulating elongate body having a proximal and a distal end and a peripheral surface;

a plurality of elongate electrical conductors, each conductor having a proximal end and a distal end, each conductor carried within the elongate body and extending longitudinally along substantially the entire length between the proximal and distal ends of the elongate body;

a plurality of electrodes located at or near the distal end of the elongate body, each electrode being coupled to the distal end of at one of the conductors; and
a means for performing the functions of coating an insulating portion of the peripheral surface at or near the distal end of the elongate body, providing at least one of a rough surface, a porous surface, and a swollen surface, after being exposed to an aqueous substance, for fixation of tissue thereto.

18. A cardiac rhythm management system, including:
 - an electronics unit; and
 - a lead coupled to the electronics unit, the lead including:
 - an insulating elongate body having a proximal and a distal end and a peripheral surface;
 - at least one elongate electrical conductor, having a proximal end and a distal end, the conductor carried within the elongate body and extending longitudinally along substantially the entire length between the proximal and distal ends of the elongate body;
 - at least one electrode located at or near the distal end of the elongate body, the electrode being coupled to the distal end of the conductor; and
 - an at least partially dissolvable coating at least partially on an insulating portion of the peripheral surface at or near the distal end of the elongate body, the coating providing at least one of a rough surface, a porous surface, and a swollen surface after being exposed to an aqueous substance.

19. A method of providing cardiac rhythm management therapy, the method including:
 - translumenally disposing a lead in a heart;
 - exposing the lead to an aqueous substance;

partially dissolving a coating at least partially on an insulating portion of the lead to provide at least one of a rough surface, a porous surface, and a swollen surface, thereby promoting tissue ingrowth.

20. The method of claim 19, in which disposing the lead includes disposing the lead in at least one of a right atrium and a right ventricle of the heart.

21. The method of claim 19, in which disposing the lead includes disposing the lead in at least one of a coronary sinus and a great cardiac vein of the heart.

22. The method of claim 19, in which partially dissolving the coating includes releasing a therapeutic agent.

23. The method of claim 22, in which releasing the therapeutic agent includes releasing at least one of a drug, a steroid, a corticosteroid, an antibiotic, and an antirejection agent.

24. The method of claim 23, in which releasing the therapeutic agent includes releasing at least one of dexamethasone, dexamethasone acetate, and dexamethasone sodium phosphate.

25. The method of claim 19, in which dissolving the coating includes releasing a therapeutic agent that promotes friable tissue associated with the insulating portion of the peripheral surface of the lead for easier lead removal.

26. A method of forming a leadwire, the method comprising:
forming at least one elongate electrical conductor, having a proximal end and a distal end;
forming at least one electrode at and coupled to a distal end of the conductor;

forming an insulating elongate body covering substantially all of the conductor and leaving exposed at least a portion of the electrode; coating portions of the insulating elongate body near the distal end of the conductor with an at least partially dissolvable coating, the coating providing at least one of a rough surface, a porous surface, and a swollen surface after being exposed to an aqueous substance.

27. The method of claim **26**, in which coating includes applying a medium carrying soluble elements.

28. The method of claim **27**, in which coating further includes applying biocompatible silicone adhesive carrying a steroid.

29. The method of claim **28**, in which coating further includes applying biocompatible silicone adhesive including at least one of dexamethasone, dexamethasone acetate, and dexamethasone sodium phosphate.

30. The method of claim **27**, in which coating includes applying biocompatible silicone adhesive including up to 40% of at least one of dexamethasone, dexamethasone acetate, and dexamethasone sodium phosphate.

31. The method of claim **27**, in which coating includes applying biocompatible silicone adhesive including up to 35% of at least one of dexamethasone, dexamethasone acetate, and dexamethasone sodium phosphate.

32. The method of claim **27**, in which coating includes applying biocompatible silicone adhesive including up to 30% of at least one of dexamethasone, dexamethasone acetate, and dexamethasone sodium phosphate.

33. The method of claim **27**, in which coating includes applying biocompatible silicone adhesive including between 30% and 40% of at least one of dexamethasone, dexamethasone acetate, and dexamethasone sodium phosphate.

34. The method of claim **26**, further including coating a portion of the electrode with the at least partially dissolvable coating.

35. The method of claim **26**, in which coating portions of the insulating elongate body includes providing a therapeutic agent that, upon at least partial dissolution of the coating, provides friable tissue associated with the insulating portion of the peripheral surface of the lead for easier lead removal.